AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of claims:

1. (Currently Amended) A compound of Formula (I)

$$\mathbb{R}^{2} \xrightarrow{\mathbb{N}^{*}} \mathbb{N}$$

$$\mathbb{R}^{5}$$

$$(I)$$

their enantiomers, diastereomers, and pharmaceutically acceptable salts, and solvates thereof, wherein:

R¹ is hydrogen or alkyl;

 R^2 is

W is O or S;

 Y^1 is -NHT¹⁵ or OT¹⁰;

Y² and Y³ are independently hydrogen, halo, OT¹⁰, haloalkyl, or alkyl;

Y⁴ is optionally substituted heteroaryl, cyano, C(O)_tT¹⁰ or S(O)_tNT¹⁴T¹⁵;

Y⁵ is alkyl, NHT¹⁵ or OT¹⁰;

 $Z \ is \ \text{-NR}^3 \text{R}^4, \ \text{-NR}^3 \text{SO}_2 \text{R}^6, \ \text{OR}^4, \ \text{SR}^4, \ \text{haloalkyl} \ \text{or halogen};$

J¹ is O or S;

J² is optionally substituted C₂alkylene;

- R³ and R⁴ are independently H, alkyl, alkenyl, aryl, (aryl)alkyl, heteroaryl, (heteroaryl)alkyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclo or (heterocyclo)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T⁴, T⁵ and/or T⁶:
- or R³ and R⁴ may be taken together with the nitrogen atom to which they are attached to form a heterocyclo or heteroaryl ring, either of which is optionally independently substituted where valance allows with one to three groups independently selected from T⁴, T⁵ and/or T⁶;

R⁵ is

- (i) H, cyano, alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be independently substituted where valance allows with one to three groups T⁷, T⁸ and/or T⁹; or
- (ii) $-C(O)_tR^7$, $-C(O)-C(O)-C(O)OR^7$ or $-SO_2R^8$;
- R⁶ is alkyl, alkenyl, aryl, (aryl)alkyl, heteroaryl, (heteroaryl)alkyl, cycloalkyl, (cycloalkyl)alkyl, heterocy<u>c</u>lo, or (heterocyclo)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T⁴, T⁵ and/or T⁶;

 R^7 is

- (i) H, alkyl, alkenyl, heterocyclo, (heterocyclo)alkyl, (hydroxy)alkyl, (alkoxy)alkyl, (aryloxy)alkyl, heteroaryl, aryl or (aryl)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T⁷, T⁸ and/or T⁹; or
- (ii) -NR⁹R¹⁰ or (NR⁹R¹⁰)alkyl;

 R^8 is

(i) alkyl, alkenyl, heterocyclo, (heterocyclo)alkyl, (hydroxy)alkyl, (alkoxy)alkyl, (aryloxy)alkyl, heteroaryl, aryl or (aryl)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T⁷, T⁸ and/or T⁹; or

- (ii) $-NR^9R^{10}$ or (NR^9R^{10}) alkyl;
- R⁹ and R¹⁰ are independently H, alkyl, alkenyl, aryl, (aryl)alkyl, heteroaryl, (heteroaryl)alkyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclo or (heterocyclo)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T⁷, T⁸ and/or T⁹:
- T^{1} , T^{2} , T^{3} , T^{4} , T^{5} , T^{6} , T^{7} , T^{8} and T^{9} are each independently
 - (i) alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocycle[[y]]o)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be optionally independently substituted by one or more groups selected from alkyl, (hydroxy)alkyl, halo, cyano, nitro, OH, oxo, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, $-OT^{10}$, -SH, $-ST^{10}$, $-C(O)_tH$, $-C(O)_tT^{10}$, $-O-C(O)T^{10}$, $-T^{17}$ - $C(O)_tN(T^{11})T^{10}$, $-SO_3H$, $-S(O)_tT^{10}$, $-S(O)_tN(T^{11})T^{10}$, $-T^{12}$ - $N(T^{14})^{-15}$, and $-T^{12}$ - $N(T^{16})^{-13}$ - $-T^{13}$ - $-T^{13}$ - $-T^{13}$ - $-T^{12}$ - $-T^{13}$ --
 - (ii) halo, cyano, nitro, OH, oxo, -SH, amino, $-OT^{10}$, $-ST^{10}$, $-C(O)_tH$, $-C(O)_tT^{10}$, $-O-C(O)_t^{10}$, $-T^{17}$ - $C(O)_tN(T^{11})T^{10}$, $-SO_3H$, $-S(O)_tT^{10}$, $-S(O)_tN(T^{11})T^{10}$, $-T^{12}$ - $NT^{14}T^{15}$, $-T^{12}$ - $N(T^{11})$ - T^{13} - $NT^{14}T^{15}$, or $-T^{12}$ - $N(T^{16})$ - T^{13} -H;

t is 1 or 2;

- T¹⁰ is alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl;
- $T^{12} \text{ and } T^{13} \text{ are each independently a single bond, } -T^{17}\text{-}S(O)_t\text{-}T^{18}\text{-}, -T^{17}\text{-}C(O)\text{-}T^{18}\text{-}, -T^{17}\text{-}C(S)\text{-}T^{18}\text{-}, -T^{17}\text{-}C(S)\text{-}T^{1$
- T^{11} , T^{14} , T^{15} , T^{16} and T^{19} are each independently
 - (i) hydrogen, alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be optionally independently substituted where valence permits by one or more groups selected from alkyl, (hydroxy)alkyl, halo, cyano, nitro, OH, oxo, (alkoxy)alkyl, alkenyl, alkynyl,

- cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, (heteroaryl)alkyl, —SH, –ST 22 , –C(O)_tH, –C(O)_tT 22 , –O-C(O)T 22 and -S(O)_tT 22 ; or
- (ii) halo, cyano, nitro, OH, oxo, -SH, amino, $-OT^{22}$, $-ST^{22}$, $-C(O)_tH$, $-C(O)_tT^{22}$, $-O-C(O)_tT^{22}$, $-SO_3H$, or $-S(O)_tT^{22}$; or
- (iii) T¹⁴ and T¹⁵ may together be alkylene or alkenylene, completing a 3- to 8-membered saturated or unsaturated ring together with the atoms to which they are attached, which ring is substituted with one or more groups listed in the description of T²⁰; or
- (iv) T¹⁴ or T¹⁵, together with T¹¹, may be alkylene or alkenylene completing a 3- to 8-membered saturated or unsaturated ring together with the nitrogen atoms to which they are attached, which ring is substituted with one or more groups listed in the description of T²⁰; or
- (v) T^{14} and T^{15} or T^{11} and T^{16} together with the nitrogen atom to which they are attached may combine to form a group -N=C $T^{20}T^{21}$;

 T^{17} and T^{18} are each independently a single bond, alkylene, alkenylene or alkynylene; T^{20} and T^{21} are each

- (i) independently hydrogen, alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be optionally independently substituted where valence permits by one or more groups selected from alkyl, (hydroxy)alkyl, halo, cyano, nitro, OH, oxo, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, (heteroaryl)alkyl, —SH, $-ST^{22}$, $-C(O)_tH$, $-C(O)_tT^{22}$, $-O-C(O)T^{22}$ and $-S(O)_tT^{22}$; or
- (ii) halo, cyano, nitro, OH, oxo, -SH, amino, $-OT^{22}$, $-ST^{22}$, $-C(O)_tH$, $-C(O)_tT^{22}$, $-O-C(O)T^{22}$, $-SO_3H$, or $-S(O)_tT^{22}$; and
- T²² is alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl.

2. - 3. (Canceled)

4. (Previously Presented) A compound of claim 1, their enantiomers, diastereomers, and pharmaceutically acceptable salts, and solvates thereof, wherein:

 R^2 is

W is O or S;

 Y^1 is -NHT¹⁵ or OT¹⁰; and

Y² is alkyl or haloalkyl.

- 5. (Canceled)
- 6. (Currently Amended) A compound of Formula (Ia)

their enantiomers, diastereomers, and pharmaceutically acceptable salts, and solvates thereof, wherein:

W is O or S;

 Y^{1} is -NHT¹⁵ or OT¹⁰;

Y² is alkyl or haloalkyl;

Z is -NR³R⁴, -NHCH₂CH₂NHC(O)CH₃, or halogen; J¹ is O;

J² is optionally substituted C₂alkylene;

R³ and R⁴ are independently H, alkyl, alkenyl, aryl, (aryl)alkyl, heteroaryl, (heteroaryl)alkyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclo or (heterocyclo)alkyl, any of which may be

optionally independently substituted where valance allows with one to three groups T^4 , T^5 and/or T^6 ;

or R³ and R⁴ may be taken together with the nitrogen atom to which they are attached to form a heterocyclo or heteroaryl ring, either of which is optionally independently substituted where valance allows with one to three groups independently selected from T⁴, T⁵ and/or T⁶;

R⁵ is

- (i) H, cyano, alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be independently substituted where valance allows with one to three groups T⁷, T⁸ and/or T⁹; or
- (ii) $-C(O)_{t}R^{7}$, $-C(O)-C(O)-C(O)OR^{7}$ or $-SO_{2}R^{8}$;

R⁶ is alkyl, alkenyl, aryl, (aryl)alkyl, heteroaryl, (heteroaryl)alkyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclo or (heterocyclo)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T⁴, T⁵ and/or T⁶;

 R^7 is

- (i) H, alkyl, alkenyl, heterocyclo, (heterocyclo)alkyl, (hydroxy)alkyl, (alkoxy)alkyl, (aryloxy)alkyl, heteroaryl, aryl or (aryl)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T⁷, T⁸ and/or T⁹; or
- (ii) $-NR^9R^{10}$ or (NR^9R^{10}) alkyl;

R⁸ is

- (i) alkyl, alkenyl, heterocyclo, (heterocyclo)alkyl, (hydroxy)alkyl, (alkoxy)alkyl, (aryloxy)alkyl, heteroaryl, aryl or (aryl)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T⁷, T⁸ and/or T⁹; or
- (ii) -NR⁹R¹⁰ or (NR⁹R¹⁰)alkyl;
- R⁹ and R¹⁰ are independently H, alkyl, alkenyl, aryl, (aryl)alkyl, heteroaryl, (heteroaryl)alkyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclo or (heterocyclo)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T⁷, T⁸ and/or T⁹;

 T^{4} , T^{2} , T^{3} , T^{4} , T^{5} , T^{6} , T^{7} , T^{8} and T^{9} are each independently

- (i) alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be optionally independently substituted by one or more groups selected from alkyl, (hydroxy)alkyl, halo, cyano, nitro, OH, oxo, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, -OT¹⁰, -SH, -ST¹⁰, -C(O)tH, -C(O)tT¹⁰, -O-C(O)T¹⁰, -T¹⁷-C(O)tN(T¹¹)T¹⁰, -SO₃H, -S(O)tT¹⁰, -S(O)tN(T¹¹)T¹⁰, -T¹²-NT¹⁴T¹⁵, -T¹²-N(T¹¹)-T¹³-NT¹⁴T¹⁵, and -T¹²-N(T¹⁶)-T¹³-H:
- (ii) halo, cyano, nitro, OH, oxo, -SH, amino, $-OT^{10}$, $-ST^{10}$, $-C(O)_tH$, $-C(O)_tT^{10}$, $-O-C(O)_tT^{10}$, $-T^{17}$ - $C(O)_tN(T^{11})T^{10}$, $-SO_3H$, $-S(O)_tT^{10}$, $-S(O)_tN(T^{11})T^{10}$, $-T^{12}$ - $NT^{14}T^{15}$, $-T^{12}$ - $N(T^{11})$ - T^{13} - $NT^{14}T^{15}$, or $-T^{12}$ - $N(T^{16})$ - T^{13} -H;

t is 1 or 2;

- T¹⁰ is alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl;
- $T^{12} \text{ and } T^{13} \text{ are each independently a single bond, } -T^{17}\text{-}S(O)_t\text{-}T^{18}\text{-}, -T^{17}\text{-}C(O)\text{-}T^{18}\text{-}, -T^{17}\text{-}C(S)\text{-}T^{18}\text{-}, -T^{17}\text{-}C(S)\text{-}T^{1$
- T¹¹, T¹⁴, T¹⁵, T¹⁶ and T¹⁹ are each independently
 - (i) hydrogen, alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be optionally independently substituted where valence permits by one or more groups selected from alkyl, (hydroxy)alkyl, halo, cyano, nitro, OH, oxo, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, (heteroaryl)alkyl, —SH, —ST²², —C(O)tH, —C(O)tT²², —O-C(O)T²² and -S(O)tT²²; or

- (ii) halo, cyano, nitro, OH, oxo, -SH, amino, $-OT^{22}$, $-ST^{22}$, $-C(O)_tH$, $-C(O)_tT^{22}$, $-O-C(O)T^{22}$, $-SO_3H$, or $-S(O)_tT^{22}$; or
- (iii) T¹⁴ and T¹⁵ may together be alkylene or alkenylene, completing a 3- to 8-membered saturated or unsaturated ring together with the atoms to which they are attached, which ring is substituted with one or more groups listed in the description of T²⁰; or
- (iv) T¹⁴ or T¹⁵, together with T¹¹, may be alkylene or alkenylene completing a 3- to 8-membered saturated or unsaturated ring together with the nitrogen atoms to which they are attached, which ring is substituted with one or more groups listed in the description of T²⁰; or
- (v) T^{14} and T^{15} or T^{11} and T^{16} together with the nitrogen atom to which they are attached may combine to form a group -N= $CT^{20}T^{21}$;

 T^{17} and T^{18} are each independently a single bond, alkylene, alkenylene or alkynylene; T^{20} and T^{21} are each

- independently hydrogen, alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocycl[[c]]o)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be optionally independently substituted where valence permits by one or more groups selected from alkyl, (hydroxy)alkyl, halo, cyano, nitro, OH, oxo, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, (heteroaryl)alkyl, —SH, —ST²², —C(O)tH, -C(O)tT²², —O-C(O)T²² and -S(O)tT²²; or
- (ii) halo, cyano, nitro, OH, oxo, -SH, amino, $-OT^{22}$, $-ST^{22}$, $-C(O)_tH$, $-C(O)_tT^{22}$, $-O-C(O)_tT^{22}$, $-SO_3H$, or $-S(O)_tT^{22}$; and
- T²² is alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl.
- 7. (Previously Presented) A compound of claim 6, their enantiomers, diastereomers, and pharmaceutically acceptable salts, and solvates thereof, wherein Z is selected from:

8. (Previously Presented) A compound of claim 6, their enantiomers, diastereomers, and pharmaceutically acceptable salts, and solvates thereof, wherein R⁵ is selected from:

$$S = 0$$
 $O = 0$
 $O =$

9. (Previously Presented) A compound of claim 1 having Formula (II)

Q
$$X^1$$
 X^2 X^3 X^4 X^4 X^4 X^5 X^4 X^5 X^4 X^5 X^4 X^5 X^4 X^5 X^4 X^5 X^5 X^6 X^7

their enantiomers, diastereomers, and pharmaceutically acceptable salts, and solvates thereof, wherein:

Q is O or S; and

 X^1 , X^2 , X^3 and X^4 are

- (i) independently chosen from hydrogen, T¹⁰, OT¹⁰ and NT¹⁴T¹⁵; or
- (ii) X^1 and X^2 or X^3 and X^4 may be taken together to be a carbonyl group.
- 10. (Previously Presented) A compound of claim 9, their enantiomers, diastereomers, and pharmaceutically acceptable salts, and solvates thereof, wherein Q is O.

11. – 14. (Canceled)

- 15. (Previously Presented) A pharmaceutical composition comprising at least one compound of claim 1 and a pharmaceutically acceptable carrier or diluent.
- 16. (Previously Presented) A pharmaceutical composition comprising a pharmaceutically acceptable carrier or diluent and at least one compound selected from:
 - (i) 2-[8-(4-Methanesulfonyl-benzyl)-4-(3-oxo-piperazin-1-yl)-6,7-dihydro-pyrimido[5,4-b][1,4]oxazin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;
 - 4-Methyl-2-[4-morpholin-4-yl-8-(3,4,5-trimethoxy-benzyl)-6,7-dihydro-pyrimido[5,4-b][1,4]oxazin-2-ylamino]-thiazole-5-carboxylic acid ethyl ester;
 - 4-Methyl-2-[4-morpholin-4-yl-8-(4-sulfamoyl-benzyl)-6,7-dihydro-pyrimido[5,4-b][1,4]oxazin-2-ylamino]-thiazole-5-carboxylic acid ethyl ester;
 - 2-[4-(4-Hydroxy-piperidin-1-yl)-8-(4-sulfamoyl-benzyl)-6,7-dihydro-pyrimido[5,4-b][1,4]oxazin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;
 - 4-Methyl-2-[4-(3-oxo-piperazin-1-yl)-8-(4-sulfamoyl-benzyl)-6,7-dihydro-pyrimido[5,4-b][1,4]oxazin-2-ylamino]-thiazole-5-carboxylic acid ethyl ester;
 - 2-[8-(4-Methanesulfonyl-benzyl)-4-morpholin-4-yl-6,7-dihydro-pyrimido[5,4-b][1,4]oxazin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester; and
 - 2-[4-(4-Hydroxy-piperidin-1-yl)-8-(4-methanesulfonyl-benzyl)-6,7-dihydro-pyrimido[5,4-b][1,4] oxazin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester; or
- (ii) the enantiomers, diastereomers, and pharmaceutically acceptable salts, and solvates of each of (i).

17. – 19 (Canceled).

20. (Previously Presented) A method of treating a leukocyte activation-associated disorder which comprises administering an effective amount of at least one compound of claim 1, 6, or 21 wherein said disorder is transplant rejection, graph verses host disease, rheumatoid arthritis, multiple

sclerosis, juvenile diabetes, asthma, inflammatory bowel disease, ischemic or reperfusion injury, cell proliferation, or psoriasis.

- 21. (Previously Presented) A compound selected from
- (i) 2-[8-(4-Methanesulfonyl-benzyl)-4-(3-oxo-piperazin-1-yl)-6,7-dihydro-pyrimido[5,4-b][1,4]oxazin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;
 - 4-Methyl-2-[4-morpholin-4-yl-8-(3,4,5-trimethoxy-benzyl)-6,7-dihydro-pyrimido[5,4-b][1,4]oxazin-2-ylamino]-thiazole-5-carboxylic acid ethyl ester;
 - 4-Methyl-2-[4-morpholin-4-yl-8-(4-sulfamoyl-benzyl)-6,7-dihydro-pyrimido[5,4-b][1,4]oxazin-2-ylamino]-thiazole-5-carboxylic acid ethyl ester;
 - 2-[4-(4-Hydroxy-piperidin-1-yl)-8-(4-sulfamoyl-benzyl)-6,7-dihydro-pyrimido[5,4-b][1,4]oxazin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;
 - 4-Methyl-2-[4-(3-oxo-piperazin-1-yl)-8-(4-sulfamoyl-benzyl)-6,7-dihydro-pyrimido[5,4-b][1,4]oxazin-2-ylamino]-thiazole-5-carboxylic acid ethyl ester;
 - 2-[8-(4-Methanesulfonyl-benzyl)-4-morpholin-4-yl-6,7-dihydro-pyrimido[5,4-b][1,4]oxazin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester; and
 - 2-[4-(4-Hydroxy-piperidin-1-yl)-8-(4-methanesulfonyl-benzyl)-6,7-dihydro-pyrimido[5,4-b][1,4] oxazin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester; or
- (ii) the enantiomers, diastereomers, and pharmaceutically acceptable salts, and solvates of each of (i).
 - 22. (Previously Presented) A compound of Formula (Ia)

their enantiomers, diastereomers, pharmaceutically acceptable salts, and solvates thereof, wherein: W is O or S;

Y¹ is -NHT¹⁵ or OT¹⁰;

Y² is alkyl or haloalkyl;

J¹ is O;

J² is optionally substituted C₂alkylene;

Z is selected from:

R⁵ is selected from:

$$\begin{array}{c} \begin{array}{c} \\ \\ \\ \\ \\ \\ \end{array} \end{array}$$

- T¹⁰ is alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, or (heteroaryl)alkyl;
- T¹⁵ is (i) hydrogen, alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be optionally independently substituted where valence permits by one or more groups selected from alkyl, (hydroxy)alkyl, halo, cyano, nitro, OH, oxo, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, (heteroaryl)alkyl, —SH, —ST²², —C(O)tH, -C(O)tT²², —O-C(O)T²² and -S(O)tT²²; or
 - (ii) halo, cyano, nitro, OH, oxo, -SH, amino, $-OT^{22}$, $-ST^{22}$, $-C(O)_tH$, $-C(O)_tT^{22}$, $-O-C(O)T^{22}$, $-SO_3H$, or $-S(O)_tT^{22}$;

t is 1 or 2; and

T²² is alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, or (heteroaryl)alkyl.